



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MEMORANDUM

DATE: February 23, 2011

SUBJECT: Chemistry Scoping Document for the Registration Review of Putrescent Whole Egg Solids.

Registration Review Case #: 4079
PC Code: 105101
CAS #: 51609-52-0
Chemical Class: Biochemical

FROM: Angela L. Gonzales, Biologist *Angehl Gonzales* 2/23/11
Biochemical Pesticides Branch
Biopesticides & Pollution Prevention Division (7511P)

TO: Menyon Adams, Regulatory Action Leader
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Biopesticides & Pollution Prevention Division (7511P)

ACTION REQUESTED

The following scoping document contains the chemistry assessment for the biopesticide putrescent whole egg solids (PWES) in support of the development of the Registration Review Work Plan.

Executive Summary

Based on the data and information available, the Agency does not foresee the need for new product chemistry data for PWES. All data requirements under 40 CFR 158.2030 have been fulfilled.

I. Background

Putrescent whole egg solids are produced from eggs which the United States Department of Agriculture (USDA) has declared inedible for human consumption due to cracked shells, excessive blood spots or other imperfections not conforming to the standards set for food use. Pesticide products containing the active ingredient are used as animal repellents and fly attractants.

The ingredient was first registered by the Agency in May, 1975. There are currently 16 end-use products (EPs) containing the active ingredient that are registered. Nine of these products contain other active ingredients; 7 contain PWES as the sole active ingredient. There are no manufacturing-use products (MPs) registered by the Agency at this time.

The active ingredient is classified as a minimum risk pesticide that is exempt from the requirements of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) under 40 CFR 125.25(f) when all criteria under this exemption are met. It is currently approved for use as an inert ingredient in pesticide products.

II. Tolerance

PWES are exempt from the requirement of a tolerance under 40 CFR 180.1071(a):

§ 180.1071 Peanuts, Tree Nuts, Milk, Soybeans, Eggs, Fish, Crustacea, and Wheat; exemption from the requirement of a tolerance.

(a) *General*. Residues resulting from the following uses of the food commodity forms of peanuts, tree nuts, milk, soybeans, eggs (including putrescent eggs), fish, crustacea, and wheat are exempted from the requirement of a tolerance in or on all food commodities under FFDCA section 408 (when used as either an inert or an active ingredient in a pesticide formulation), if such use is in accordance with good agricultural practices:

- (1) Use in pesticide products intended to treat seeds.
- (2) Use in nursery and greenhouse operations, as defined in 40 CFR 170.3, which includes seeding, potting and transplanting activities.
- (3) Pre-plant and at-transplant applications.
- (4) Incorporation into seedling and planting beds.
- (5) Applications to cuttings and bare roots.
- (6) Applications to the field that occur after the harvested crop has been removed.

- (7) Soil-directed applications around and adjacent to all plants.
 - (8) Applications to rangelands, which is land, mostly grasslands, whose plants can provide food (i.e., forage) for grazing or browsing animals.
 - (9) Use in chemigation and irrigation systems (via flood, drip, or furrow application with no overhead spray applications).
 - (10) Application as part of a dry fertilizer on which an active ingredient is impregnated.
 - (11) Aerial and ground applications that occur when no above-ground harvestable food commodities are present (usually pre-bloom).
 - (12) Application as part of an animal feed-through product.
 - (13) Applications as gel and solid (non-liquid/non-spray) crack and crevice treatments that place the gel or bait directly into or on top of the cracks and crevices via a mechanism such as a syringe.
 - (14) Applications to the same crop from which the food commodity is derived, whether the plant fraction(s) intended for harvest are present or not, e.g., applications of peanut meal when applied to peanut plants.
- [70 CFR 1360, Jan. 7, 2005]

III. Active Ingredient Characterization

All of the required product chemistry data requirements have been satisfied on the active ingredient. The product chemistry data submitted are summarized in Table 1 and the physical and chemical properties data are summarized in Table 2.

TABLE 1. Product Chemistry Data Requirements for <i>Putrescent Whole Egg Solids</i> (40 CFR § 158.2030)		
OCSPP Guideline No.	Study	Results
830.1550 to 830.1670	Product identity; Manufacturing process; Discussion of formation of unintentional ingredients	Data requirements have been satisfied (CBI). Data are required for unregistered sources of the active ingredient.
830.1700	Preliminary analysis	Data requirement has been satisfied (CBI). Data are required for unregistered sources of the active ingredient.
830.1750	Certification of limits	Data requirement has been satisfied. Data are required for unregistered sources of the active ingredient.
830.1800	Analytical method	Data requirement has been satisfied (CBI). Data are required for unregistered sources of the active ingredient.

TABLE 2. Physical and Chemical Properties of Putrescent Whole Egg Solids (40 CFR § 158.2030)

OCSPP Guideline No.	Property	Description of Result	MRID
830.6302	Color	Light brown, beige	42072103 47396912
830.6303	Physical State	Powder	42072103 47396912
830.6304	Odor	Slightly "malty"	42072103
830.6313	Stability to Normal and Elevated Temperatures, Metals and Metal Ions	Decomposes when exposed to air, moisture, etc.	42072103
830.6315	Flammability	Does not contain combustible liquids	47396912
830.6317	Storage Stability	Not required for TGAI	
830.6319	Miscibility	Not required for TGAI	
830.6320	Corrosion Characteristics	Not required for TGAI	
830.7000	pH	6.4	42072103
830.7050	UV/Visible Light Absorption	Not required at this time; not expected to provide information necessary for the risk assessment	
830.7100	Viscosity	N/A; the TGAI is a solid.	
830.7200	Melting Point/Range	When heat is applied to the substance, it gradually changes color from light brown to black (decomposition) before melting of the powder can be observed	47417801
830.7220	Boiling Point/Range	N/A; the TGAI is a solid	
830.7300	Density	0.514 g/ml	47417801

TABLE 2. Physical and Chemical Properties of <i>Putrescent Whole Egg Solids</i> (40 CFR § 158.2030)			
OCSPP Guideline No.	Property	Description of Result	MRID
830.7520	Particle Size, Fiber Length and Diameter Distribution	Not required at this time	
830.7550 830.7560 830.7570	Partition Coefficient (n-Octanol/Water)	Not required at this time; not expected to provide information necessary for the risk assessment	
830.7840	Water Solubility	Practically insoluble in water	42072103 47417801
830.7950	Vapor Pressure	Not required at this time; not expected to provide information necessary for the risk assessment	

cc: A. L. Gonzales, M. Adams, BPPD Science Review File, IHAD/ARS
A. L. Gonzales, FT, PY-S: 2/23/11